**RENT A CAR SYSTEM**

CLASSES DOCUMENTATION

1. ***User***

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| Name: String | The name of the user |
| Email: String | The email used by the user |
| Password: String | The password for this user to access his data |
| Phone: String | The phone number stored for this user |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| SignUp(name,email,password,phone) | This method is responsible for receiving the user’s data & creating a new account in the system | Void |
| LogIn(email, password) | This method is responsible for logging an existing user into the system | Boolean |
| getName() | This method fetches & returns the user’s name | String |
| setName(name) | This method is responsible for setting the user’s name | void |
| getEmail() | This method returns the user’s registered email in the system | String |
| getPassword() | This method fetches & returns the user’s password that is stored in the system | String |
| setPassword(password) | This method is responsible for setting the user’s password that is stored in the system | Void |
| getPhone() | This method fetches the user’s registered phone number | String |
| setPhone(phone) | This method is responsible for setting the user’s phone number that is stored in the system | Void |
| getUserData() | This method is responsible for fetching/getting the user’s data that is stored in the system | Void |

1. **Renter extends *User***

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Renter(name,email,password,phone) | The Constructor for the Renter class. | -- |

1. **Admin extends *User***

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| AdminID : String | The Identification number for the admin |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Admin(AdminID, name,email,password,phone) | The Constructor for the customer class. | -- |
| getAdminID() | Returns the ID for the admin | String |
| setAdminID(newID) | Sets the admin id to the one given in the parameters | Void |
| getAllData() | Prints all the data for the admin | Void |

1. **Customer extends *Renter***

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| SCN: String | The social security number for this customer |
| Licence\_number: String | The License number for this customer |
| end\_license\_Date: Date | The date for when the driver’s license for this customer ends |
| DOB: Date | The date of birth for this customer |
| handicap: Boolean | The handicap status for this customer |
| C\_Reservation: Reservation | The reservation that is ordered/issued by this customer |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Customer(name,email,password,phone,SCN,  License\_Number, end\_license\_date, DOB, Handicap\_status) | The Constructor for the customer class. | -- |
| getSCN() | Returns the social security number for this customer | String |
| setSCN(SCN) | Sets the social security number for this customer to the one given in the parameters | Void |
| getLicense\_number() | Returns the driver’s license number for this customer | String |
| setLicense\_number(license\_number) | Sets the driver’s license number for this customer to the one given in the parameters | Void |
| getEnd\_license\_Date() | Returns the date for when the driver’s license for this customer ends | Date |
| setEnd\_license\_Date() | Sets the date of the driver’s license for this customer ending to the one given in the parameters | Void |
| getDOB() | Returns the date of birth for this customer | Date |
| setDOB(date\_of\_birth) | sets the date of birth for this customer to the one given in the parameter | Void |
| getHandicap() | Returns the handicap status for this customer | Boolean |
| setHandicap(status) | sets the handicap status for this customer | Boolean |
| getReservation() | Returns the reservation issued by this customer | Reservation |
| setReservation(Reservation) | sets the reservation issued by this customer | Void |
| Get\_All\_Data() | prints all the data for this customer that is stored in the system | Void |

1. **Organization extends *Renter***

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| Org\_Id | The identification number for this organization |
| Supervisor | The Supervisor for this organization |
| O\_Reservation: Reservation | The reservation that is ordered/issued by this organization |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Organization(name,email,password,phone,  org\_id,super\_vic) | The Constructor for the organization class. | -- |
| getOrg\_Id() | Returns the identification number for this organization | String |
| setOrg\_Id(Id) | sets the identification number for this organization to the one given in the parameter | Void |
| getSuper\_vic() | ???????????????????????????? | String |
| setSuper\_vic(Supervisor) | ???????????????????????????? | Void |
| getReservation() | Returns the reservation issued by this organization | Reservation |
| setReservation(Reservation) | sets the reservation issued by this organization | Void |
| Get\_All\_Data() | prints all the data for this organization that is stored in the system | Void |

1. **Reservation**

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| reserveID: int | The identification number for this reservation |
| Renter\_id : String | The identification number for the renter in this reservation |
| Car : car | The car involved included in this reservation |
| Date\_Srent : Date | The starting date for this reservation |
| Date\_Frent : Date | The finish date for this reservation |
| total\_Price : Double | The total price for this reservation |
| number\_Days : int | The number of days the car involved in this reservation is being rented |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Reservation(reserveID, rental\_ID, car, Date\_Srent, Date\_Frent, total\_Price, Number\_days) | The Constructor for the reservation class. | -- |
| getReserveID() | Returns the identification number for this reservation | String |
| setReserveID(rID) | sets the identification number for this reservation | Void |
| getCar() | Returns the car involved in this reservation | Car |
| setCar(car) | sets the car involved in this reservation | Void |
| getDate\_Srent() | Returns the starting date for this reservation | Date |
| setDate\_Srent(date) | sets the starting date for this reservation | Void |
| getDate\_Frent() | Returns the finishing date for this reservation | Date |
| setDate\_Frent(date) | sets the finishing date for this reservation | void |
| getTotalPrice() | Returns the total price for this reservation | double |
| setTotalPrice(price) | sets the total price for this reservation | Void |
| getNumber\_days() | Returns the number of days the car involved in this reservation is being rented | Int |
| setNumber\_days() | sets the number of days the car involved in this reservation is being rented | Void |
| Get\_All\_Data() | prints all the data for this reservation that is stored in the system | Void |
| Calculate\_Total\_Price(numOfDays,priceDay) | Calculates the total price for this reservation depending on the number of days rented & the price per day for the car. | Void |

1. **Car**

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| Car\_Brand: String | The brand for this car |
| Registeration\_ID : String | The registration number for this car |
| Car\_Type: String | The type of this car |
| Model\_Year: Date | The year of the model of this car |
| Car\_Name: String | The name of this car |
| Color: String | The color of this car |
| image: Image | An image of the car |
| n\_Seats: int | The number of seats of the car |
| price\_per\_day: int | The price of renting the car by day |
| cruse: boolean | The cruse status of this car |
| Gearbox\_Type: String | The gearbox type of this car |
| Handicap\_support: Boolean | The handicap support status for this car |
| licenseNum : String | The license number for this car |
| Available : Boolean | The availability status for this car in the database. |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Car(car\_brand, registeration\_ID, car\_Type, Model\_Year, Car\_Name, color, image, n\_Seats,price\_per\_day,cruse, gearbox\_Type, handicap\_Support, licenseNum) | The Constructor for the car class. | -- |
| getCar\_Brand() | Returns the brand name for this car | String |
| setCar\_Brand(carBrand) | sets the brand name for this car | Void |
| getResiteration\_ID() | Returns the registration number for this car | String |
| setResiteration\_ID(rID) | sets the registration number for this car | Void |
| getCar\_Type() | Returns the type of the car | String |
| setCar\_Type(type) | sets the type of the car | Void |
| getCar\_Name() | Returns the name of the car | String |
| setCar\_Name(name) | sets the name of the car | Void |
| getColor() | Returns the color of the car | String |
| setColor(color) | sets the color of the car | Void |
| getImage() | Returns the Image of the car | Image |
| setImage(Image) | sets the Image of the car | void |
| getN\_Seats() | Returns the number of seats for this car | Int |
| setN\_Seats(numberofseats) | sets the number of seats for this car | Void |
| getPrice\_per\_day() | Returns the reservation price of this car by day | Int |
| setPrice\_per\_day(priceperday) | sets the reservation price of this car by day | Void |
| getCruse() | Returns the cruse status for this car | Boolean |
| setCruse(cruse) | sets the cruse status for this car | Void |
| getGearbox\_Type() | Returns the gearbox type of this car | String |
| setGearbox\_Type(gBoxType) | sets the gearbox type of this car | Void |
| getHandicap\_support() | Returns the handicap support status of this car | Boolean |
| setHandicap\_support(status) | sets the handicap support status of this car | Void |
| Get\_All\_Data() | prints all the data for this car that is stored in the system | Void |

1. **Branch**

**Attributes Summary :**

|  |  |
| --- | --- |
| **Attribute Name** | **Description** |
| Id : int | The identification number for this branch |
| City : string | The city that this branch is located in. |
| Street : string | The street/address that this branch is located in. |
| Cars : Car[] | The cars that are included in this branch |

**Method Summary :**

|  |  |  |
| --- | --- | --- |
| **Method Name** | **Description** | **Return Type** |
| Branch(id,city,street) | The Constructor for the branch class. | -- |
| addCar(car) | Adds a car to the list of cars in this branch | Void |
| getCars() | Returns the cars that are included in this branch | Car[] |
| addCars(car[] cars) | Adds an amount of cars to the list of cars at once | Void |
| setId(id) | Sets the identification for this branch to the one given in the parameters | Void |
| getId() | Returns the id of this branch. | String |
| setCity(city) | Sets the city of this branch | Void |
| getCity() | Returns the city of this branch | String |
| setStreet(street) | Sets the street of this branch | Void |
| getStreet() | gets the street of this branch | String |
| MoveCarToAnotherBranch(car,branch) | Moves the car object to the branch specified in the parameter | void |

1. **Cart**
2. **Database**
3. **Engine**